

REMARKS

Applicant has reviewed and considered the Office Action dated January 17, 2007 and the references cited therein. In response thereto, claims 6, 8, and 9 are amended; and claims 7 and 10 are canceled without prejudice or disclaimer. Claims 1-5 were canceled previously. As a result, claims 6 and 8-9 are pending in the present application.

Rejections Under 35 U.S.C. § 103

Claims 6-7 and 9-10 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Larsen et al. as in view of Stade et al. Claim 8 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Larsen et al. in view of Stade et al. as applied to claim 7 above, and further in view of Murty. Applicant respectfully traverses the rejections for at least the following reasons, in light of the amendments/clarification made herein.

Claim 6 is amended to recite a silencer for a vacuum cleaner comprising a longitudinal exhaust channel for passage of an exhaust airflow from the vacuum cleaner; a plurality of silencing boards, disposed distance apart in parallel and perpendicular to the longitudinal exhaust channel, and mounted in the exhaust channel for passage of the exhaust airflow from the vacuum cleaner, at least one of the silencing boards having a plurality of pores distributed throughout the silencing board and disposed in the longitudinal exhaust channel; and wherein a total passage area of the pores is less than half of a cross-sectional area of the exhaust channel.

Larson discloses a silencer for a vacuum cleaner. More particularly, Larson discloses a silencer element 7 with V-shaped cross-section flow passages 8 around a motor 5, and a unit 9 provided at the top of the vacuum cleaner, wherein the unit consist either of a filter or a further silencing unit (see column 3, lines 55-59; column 5, lines 1-14). However, Larson does not disclose or teach a longitudinal exhaust channel for passage of an exhaust airflow from the vacuum cleaner; a plurality of silencing boards, disposed distance apart in parallel and perpendicular to the longitudinal exhaust channel, and mounted in the exhaust channel for passage of the exhaust airflow from the vacuum cleaner, at least one of the silencing boards having a plurality of pores distributed throughout the silencing board and disposed in the

longitudinal exhaust channel; and wherein a total passage area of the pores is less than half of a cross-sectional area of the exhaust channel.

Stade discloses a plurality of baffles 30,32,34 with holes 40,42. Stade further states, “The number of holes and their size is a matter of design and depends upon the capacity of the engine the desired noise decrease, back pressure, etc. As in the case of substantially **all mufflers sold today**, the number of holes and their size may be ascertained by experiment” (column 3, lines 54-58). Further as stated in the background of the invention, Stade states that “This invention relates to mufflers for silencing the exhaust of internal combustion engines” (column 1, lines 34-35). Applicant respectfully submits that Stade’s stated design choice merely applies to mufflers for silencing the exhaust of internal combustion engines, that nowhere in Stade does it teach or disclose that the stated design choice also applies to vacuum cleaner or any other industries without undue experiment. Applicant respectfully submits that the silencer design for an internal combustion engine is significantly different from that of a vacuum cleaner in many aspects. For example, in the engine case, the engine generates intermittent exhaust airflow due to the periodic operation of the engine, whereas the vacuum cleaner generates a continuous airflow over the operation of a motor, wherein noise, pressure, exhaust channel, etc. have different specification and requirements. Applicant respectfully submits that it would not be obvious to one skilled in the vacuum cleaner art, without undue experiment, to design a silencer for a vacuum cleaner by the teaching of a mere statement without any disclosure or teaching of how it can be applied in the art. It is mere hindsight or speculation to consider the recited features as “a matter of design” without referencing to what type of applications, and more specifically, what level of noise requirement, what type of back pressure, etc. in any industry beyond the internal combustion engine industry. Thus, Applicant respectfully submits that there is no teaching or suggestion how Larson and Stade is combined to result in the claimed invention as recited in claim 6. Therefore, Applicant respectfully submits that claim 6 and its dependent claims patentably distinguish over Larson in view of Stade.

Claim 9 also recites the similar features discussed above and is patentable for the same reasons.

Murty fails to disclose or teach the above discussed features. Thus, Applicant respectfully submits claim 8 is patentable over the cited references.

Summary

In view of the above, it is respectfully submitted that the present application is in condition for allowance. Consideration of the present application and a favorable response are respectfully requested.

If a telephone conference would be helpful in resolving any remaining issues, please contact the undersigned at (612) 752-7367.

Respectfully submitted,

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